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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,469	03/31/2004	Keiji Kashima	A-474	8406

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EXAMINER	
VU, PHU	

ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

11:A

Office Action Summary	Application No.	Applicant(s)	
	10/816,469	KASHIMA, KEIJI	
	Examiner	Art Unit	
	Phu Vu	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 , 9-10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi et. al US Patent No. 6885421 in view of Uchiyama et al. US Patent No. 6638582.

Regarding claim 1 and 2, Miyachi discloses a laminated retardation layer by lamination of a positive index anisotropy with an optic axis in a normal direction to a layer plane and a retardation layer negative index anisotropy and an optical axis in a normal direction (coating layer) (see column 7 lines 42-55). Miyachi does not explicitly teach the positive index anisotrophy material to have inverse chromatic dispersion however applicant admits that a polycarbonate film having a fluorene skeleton has inverse chromatic dispersion. Uchiyama discloses a stretched polycarbonate polymer films with fluorene skeletons with excellent transparency, heat resistance, and productivity, which by applicant's admission will have inverse chromatic dispersion. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use a polycarbonate film with fluorene skeleton to provide excellent transparency and heat resistance.

Regarding claim 9 with respect to claims 1 and 2, the limitation of the coating layer has a negative index of refraction and has axis normal to the plane was already claimed in claim 1 therefore this limitation has already been met.

Regarding claim 11, Miyachi discloses a vertical alignment mode liquid crystal layer and two sheet polarizers on both sides thereof, wherein a laminated retarder of claim 1 is interposed between one of the sheet polarizers and the liquid crystal cell (see cover fig).

Regarding claim 10 with respect to claims 1 and 2, Uchimaya discloses the method of making a retardation film by stretching a polymer films and stacking of the films (see column 2 lines 28-40).

Claim 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi and Uchiyama in view of Ishii US Patent No 5134507.

Regarding claim 3, Miyachi discloses all the limitations of claim 3 except a stretched cellulose acetate film as the polymer film having inverse chromatic dispersion. Ishii discloses an optically compensating plate comprised of a cellulose acetate film to achieve a high contrast ratio (see). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art, to use a cellulose acetate film to achieve a high contrast ratio.

Regarding claim 9 with respect to 3, the limitation of the coating layer has a negative index of refraction and has axis normal to the plane was already claimed in claim 1 therefore this limitation has already been met.

Regarding claim 10 with respect to claim 3, Uchimaya discloses the method of making a retardation film by stretching a polymer films and stacking of the films (see column 2 lines 28-40).

Claims 4 - 6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi and Uchiyama (A) US Patent No. 6638582 in view of Uchiyama (B) US Patent No. 6800697 and .

Regarding claims 4 and 6, Uchiyama B discloses aromatic polyester polymers such as polycarbonates provide good heat resistance, film forming properties and optical characteristics (see). Uchiyama A, discloses mixture of retardation films having different chromatic dispersions to form a film having inverse chromatic dispersion which contribute to enhanced image quality (see fig. 9 shows a film having inverse chromatic dispersion and column 3 lines 45-51). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use a mixture of polyester polymers to control wavelength dispersion thus contributing to enhanced image quality.

Regarding claim 5, Uchiyama A discloses a polymer comprising a copolymer containing monomer units capable of yielding polymers having different chromatic dispersions and stretching said polymer to form a polymer with inverse chromatic dispersion.

Regarding claim 9 with respect to 4 and 5, the limitation of the coating layer has a negative index of refraction and has axis normal to the plane was already claimed in claim 1 therefore this limitation has already been met.

Regarding claim 10 with respect to claims 4 and 5, Uchimaya A discloses the method of making a retardation film by stretching a polymer films and stacking of the films (see column 2 lines 28-40).

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi and Uchiyama in view of Matsuoka et al. US Patent No. 6444280.

Regarding claim 7, Miyachi and Uchiyama disclose all the limitations of claim 7 except a polymerizable chiral nematic used as the coating layer in a retardation film. Matsuoka discloses a retardation film comprising polymerizable chiral nematic liquid crystal to improve image quality and viewing angle characteristics (see abstract). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use a polymerizable chiral nematic liquid crystal in a retarder to improve image quality and viewing characteristics.

Regarding claim 8, Miyachi and Uchiyama disclose all the limitations of claim 8 except a polymerizable discotic liquid crystal of homeotropic orientation layer in a coating layer of the retarder. Matsuoka discloses polymerizable discotic liqud crystal having a homeotropic orientation (see column 1 line 50 – column 2 line 9) to achieve optical compensation characteristics due to a large birefringence. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use a polymerizable discotic liquid crystal of homeotropic alignment to achieve retardation characteristics due to a large birefringence.

Regarding claim 9 with respect to claims 7 and 8, the limitation of the coating layer has a negative index of refraction and has axis normal to the plane was already claimed in claim 1 therefore this limitation has already been met.

Regarding claim 10 with respect to claims 7 and 8, Uchimaya discloses the method of making a retardation film by stretching a polymer films and stacking of the films (see column 2 lines 28-40).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu Vu
Examiner
AU 2871

DUNG T. NGUYEN
PRIMARY EXAMINER